State of Iowa - Return on Investment Program / IT Project Evaluation

SECTION 1: PROPOSAL

Project Name: **Electronic Database Directory of Health Care and Support Services Available to Senior Citizens**   Date: 07/21/00

Agency Point of Contact for Project: Greg Anliker

Agency Point of Contact Phone Number / E-mail:
Ph:515-242-3303 / e-mail: greg.anliker@dea.state.ia.us

Executive Sponsor (Agency Director or Designee) Signature: Dr. Judith A. Conlin, Director

Is this project necessary for compliance with a Federal standard, initiative, or statute? (If "Yes," cite specific requirement, attach copy of requirement, and explain in Proposal Summary)	x No
Is this project required by State statute? (If "Yes," explain in Proposal Summary)	x Yes
Does this project meet a health, safety or security requirement? (If "Yes," explain in Proposal Summary)	x No
Is this project necessary for compliance with an enterprise technology standard? (If "Yes," explain in Proposal Summary)	x Yes
Does this project contribute to meeting a strategic goal of government? (If "Yes," explain in Proposal Summary)	x Yes
Is this a "research and development" project? (If "Yes," explain in Proposal Summary)	x No

PROPOSAL SUMMARY: **In written detail, explain why the project is being undertaken and the results that are expected. This includes, but is not limited to, the following:**

1. **A pre-project (before implementation) and a post-project (after implementation) description of the system or process that will be impacted.**

Response:

Pre-Project: **Currently, no electronic statewide database exists for health-care facilities, services and providers for the elderly on a county-by-county basis.**

Post-Project: **The project will result in the creation of a comprehensive, user-friendly electronic database of health care, support services and facilities available to Iowa's elderly population. The resulting database will provide the means by which citizens may maximize and become aware of viable service options, as alternatives to nursing home care. These services generally allow Iowa's elderly population to spend a longer period of time in a home setting and a shorter period of time in a nursing home. That equates to a higher quality of life and lower costs.**

2. **A summary of the extent to which the project provides tangible and intangible benefits to either Iowa citizens or to State government. Included would be such items as qualifying for additional matching funds, improving the quality of life, reducing the government hassle factor, providing enhanced services, improving work processes, complying with enterprise technology standards, meeting a strategic goal, avoiding the loss of matching funds, avoiding program penalties/sanctions or interest charges, avoiding risks to health/security/safety, complying with federal or state laws, etc. NA**

   Response: See response to #3 below.

3. **A summary that identifies the project stakeholders and how they are impacted by the project.**

This project relates directly to a mandate within SF 2193, the "Senior Living Program Act" (hereafter referred to as "the Act"). This mandate was added to the legislation without a separate appropriation to implement it; hence the inclusion of the project in the list for pool technology funds. The Act requires that *"The department of elder affairs and the area agencies on aging, in consultation with the senior living coordinating unit, shall create, on a county basis, a database directory of all health care and support services available to seniors. The department of elder affairs shall make the database electronically available to the public, and shall update the database on at least a monthly basis."*

The project will be implemented in cooperation with the Iowa Technology Department [Dan Combs has been our contact] and be directly linked to the Iowa Resource House Project. We will continue to work with ITD for compliance regarding enterprise technology standards. The project is a part of the Health Enterprise Team's strategic Long Term Care goals, which was strongly supported by the Governor and the general assembly in a Bi-Partisan manner. **The Goal** is to "Provide access to quality health care services to all Iowans, particularly those with special needs."

Data from the State's Medicaid Program clearly demonstrates that services provided to older persons in the home setting cost an average of $444.00 per month. These services assist the elderly to live independently and delay or avoid the nursing home setting. Under Medicaid nursing home costs average $1670.00 per month per individual. The difference between these two amounts is an average monthly savings of $1226.00 for each month an individual remains out of the nursing home setting. This project actively promotes and facilitates the opportunity for the elderly to access services that help them remain in their homes for a longer period of time. Even greater savings can result for "private pay" elderly who do not qualify for Medicaid, and as a result pay higher nursing home costs.

The stakeholders in this project are varied. Included are: the Federal government, the Iowa Departments of Human Services, Elder Affairs, Public Health and Inspections and Appeals, Iowa's elderly population, families, caregivers, and taxpayers.

State Government Benefit:

For each individual who accesses home and community based services through the database resulting in avoiding nursing home care, there could be a savings as much as $1226.00 per month. For individuals eligible for Medicaid that savings directly saves the State of Iowa money. The details of this project do not seem to fit the process or template for direct ROI analysis, and therefore we have not included specific dollar amounts in this section. However, the fact remains that the project has great potential for indirect financial savings/benefit to the State.

Citizen Benefit:

In addition to the potential savings of their government, citizens will be provided with easier access to information related to meeting home, community, and institutional care needs that they, their family or friends have, twenty-four hour per day, seven day per week, through a Web based source of information. This system will result in reduced time for family or caregivers

spent away from work, on telephone calls and arranging for service provision. Those financial benefits are priceless, and the Act offers the opportunity for a permanently more responsive information and assistance system providing reduced financial and emotional costs to citizens once the database is implemented.

Opportunity Value/Risk or Loss Avoidance Benefit:

This is the most appropriate place to demonstrate the financial benefits of this proposal and the example of the financial savings reflected included in Section 3 of this proposal.

Under the Senior Living Program Act, the legislature funds our department *"…for activities related to the design, maintenance, or expansion of home and community-based services for seniors, including but not limited to adult day care, personal care, respite, homemaker, chore, and transportation services designed <u>to promote the independence of and to delay the use of institutional care by seniors with low and moderate incomes</u>."*

State Medicaid Program data clearly show that packages of such services provided to older persons in the home setting cost an average of $444.00 per month and often directly help those individuals continue living independently and avoid or delay nursing home care. The nursing home setting cost averages $1670.00 per month. This results in an average monthly "nursing home avoidance" savings of $1226.00. Therefore, if the database helps result in as few as **144 months of "nursing home avoidance"** there could be a savings **<u>equal to as much as $177,566.00.</u>** This is considered a very conservative estimate, used only as an example of the "opportunity/value"

Benefits Not Cost Related or Quantifiable:

Additionally there is an opportunity for improved quality of life for the individuals who would otherwise benefit from the home and community based services that help them delay or avoid nursing home care. For people who have dealt with the stress and trauma of placing a loved one in a nursing home, the value of these types of alternative services is clear. For those who have not had this experienced, the value is nearly inexplicable. Other non-quantifiable benefits include the convenience and reduced "hassle" items mentioned above under the **"Citizen Benefits"** portion of this proposal.

SECTION 2: PROJECT PLAN

Individual project plans will vary depending upon the size and complexity of the project. A project plan includes the following information:

1. Agency Information

Project Executive Sponsor Responsibilities: Identify, in Section I, the executive who is the sponsor of the project. The sponsor must have the authority to ensure that adequate resources are available for the entire project, that there is commitment and support for the project, and that the organization will achieve successful project implementation.

Response: Dr. Judith Ann Conlin, Director

Organization Skills: Identify the skills that are necessary for successful project implementation. Identify which of these skills are available within the agency and the source(s) and acquisition plan for the skills that are lacking.

Response: Because this project will be linked with the ITD Iowa Resource House Project we will depend on the IT skills of ITD staff for the overall technical portions and guidance at the state level. Various web service providers for each of the Area Agencies on Aging, with guidance from our office will handle the technical skills at the local level. Greg Anliker and other IDEA staff will undertake the other skills necessary. Those skills include communication, coordination, and organization.

2. Project Information
Mission, Goals, Objectives: The project plan should clearly demonstrate that the project has developed from an idea to a detailed plan of action. The project plan must link the project to an agency's mission, goals, and objectives and define project objectives and how they will be reached. The project plan should include the following:

A. **Expectations**: A description of the purpose or reason that the effort is being undertaken and the results that are anticipated.

   Response: The project is being undertaken both in response to a legislative mandate, but also to enhance accessibility to information on available services for older persons on a county-by-county basis. The expected results include improved access to information by elderly citizens and their family members. Access and linkage can save significant expenses for the taxpayer and individuals served. This will save substantial dollars for the State and taxpayers.

B. **Measures**: A description of the set of beliefs, tradeoffs and philosophies that govern the results of the project and their attainment. How is the project to be judged or valued? What criteria will be used to determine if the project is successful? What happens if the project fails?

   Response: The **beliefs** are simple and straightforward – improved access to information means a more responsive system of services for the state's older persons and their families. Improved access will reduce hassles, frustrations, time and costs for citizens.

The measure of success will be whether or not there is an easily usable, statewide electronic database directory of health care and support services available to seniors, on a county basis that can be updated monthly. In the event the project is not successful, the result is the *status quo* and inability to meet an legislative mandate for the electronic access to the information.

However, **project failure is not an option.** ITD sources tell us it is a very doable project. It is simply a matter of expending the resources to put it in place, and determining whether pooled technology funds are utilized.

C. **Environment:** Who will provide input (e.g., businesses, other agencies, citizens) into the development of the solution? Are others creating similar or related projects? Are there cooperation opportunities?

Response: The department will work jointly with a committee of Area Agency on Aging (AAA) representatives and the ITD to plan and implement the project. The end product will have many similarities with other parts of the Iowa Resource House Project and will be planned and implemented in cooperation with that project.

D. **Project Management and Risk Mitigation**: A description of how you plan to manage the project budget, project scope, vendors, contracts and business process change (if applicable). Describe how you plan to mitigate project risk.

Response: The department along with the established AAA committee will help manage the project in cooperation with the ITD Iowa Resource House Project. An ITD contractor is developing a template that will provide a similar "look and feel" to the database system statewide, yet allow each organization the flexibility to add additional information beyond those required by the Act and the formal scope of this project.

Each AAA will arrange for the technical expertise at the local level regarding hosting, data collection and input and similar aspects at their local level for utilization of the template. Risk mitigation will be largely through good communications between the parties in the project.

E. **Security / Data Integrity / Data Accuracy / Information Privacy**: A description of the security requirements of the project? How will these requirements be integrated into the project and tested. What measures will be taken to insure data integrity, data accuracy and information privacy?

Response: By linking with the Iowa Resource House Project we can incorporate their security measures into the database directory. Their preliminary plans address all of these issues.

3. Current Technology Environment (Describe the following):

A. **Software (Client Side / Server Side / Midrange / Mainframe)**

- Application software
- Operating system software
- Interfaces to other systems: Identify important or major interfaces to internal and external systems

Response: There is currently a mix of software and hardware in the AAAs and the department. All are IBM compatible but otherwise the speed and capabilities vary widely.

B. **Hardware (Client Side / Server Side / Mid-range / Mainframe):**

- Platform, operating system, storage and physical environmental requirements.
- Connectivity and Bandwidth: If applicable, describe logical and physical connectivity.
- Interfaces to other systems: Identify important or major interfaces to internal and external systems.

Response: Same as "A." above.

4. Proposed Environment (Describe the following):

A. Software (Client Side / Server side / Mid-range / Mainframe)

- Application software.
- Operating system software.
- Interfaces to other systems: Identify important or major interfaces to internal and external systems.
- General parameters if specific parameters are unknown or to be determined.

Response: The project plan is to put in place uniform software uniformity in all fourteen organizations (thirteen AAAs and the department) on at least one machine. The uniform **software** will include: Windows 98, Office 2000 – Pro, and Dreamweaver/Fireworks.

B. Hardware (Client Side / Server Side / Mid-range / Mainframe)

- Platform, operating system, storage and physical environmental requirements.
- Connectivity and Bandwidth: If applicable, describe logical and physical connectivity.
- Interfaces to other systems: Identify important or major interfaces to internal and external systems.
- General parameters if specific parameters are unknown or to be determined.

Response: The **hardware** minimums will be Windows based Pentium III, 500+Mhz. computers with modems to connect to the Internet and a web site for each entity (whether hosted locally or otherwise has not yet been determined).

Data Elements: If the project creates a new database the project plan should include the specific software involved and a general description of the data elements.

Response: The Iowa Resource House Project will continue to serve as the guide.

Project Schedule: A schedule that includes: time lines, resources, tasks, checkpoints, deliverables and responsible parties.

Response: Minimum software and hardware determination finalized by 8/30/00
Purchases of software and hardware by 9/15/00
Final Template by 9/30/00
"Under construction" Web site for each organization by 10/31/00
Initial data collection and input by each location by 11/30/00
Full linkage with Iowa Resource House by 01/31/01

SECTION 3: Return On Investment (ROI) Financial Analysis

Project Budget:

 Provide the estimated project cost by expense category.

        Personnel .... $__ **24602.00**___
        Software .... $___ **7840.00**___
        Hardware............................... $__**17864.00**___
        Training .... $_____**0.00**___
        Facilities................................. $_____**0.00**___
        Professional Services .... $__**14000.00**___
        Supplies .... $_____**0.00**___
        Other (Specify)…….…………$_____ **0.00**___
                    Total.................. $__**64306.00**___

Project Funding:

Provide the estimated project cost by funding source.

        State Funds........................... $____64306.00_ ...._____100_ % of total cost
        Federal Funds....................... $_____0.00__ ...._____ % of total cost
        Local Gov. Funds.................. $_____0.00__ ...._____ % of total cost
        Private Funds........................ $_____0.00__ ...._____ % of total cost
        Other Funds (Specify) .... $_____0.00__ ...._____ % of total cost
                Total Cost: .... $____64306.00__ ...._____100_ % of total cost

How much of the cost would be incurred by your agency
from normal operating budgets (staff, equipment, etc.)? ....$____0.00____0_%

How much of the cost would be paid by "requested IT project funding"? ..$64306.00_100.00%

Provide the estimated project cost by fiscal year: FY__2001_ $_____64306.00_____

 Annual Maintenance Cost of the System is expected to be negligible.

ROI Financial Worksheet Directions (Attach Written Detail as Requested):

Annual Pre-Project Cost -- Quantify, in written detail, all actual State government direct and indirect costs (personnel, support, equipment, etc.) associated with the activity, system or process prior to project implementation. This section should be completed only if State government costs are expected to be reduced as a result of project implementation.

Annual Post-Project Cost -- Quantify, in written detail, all estimated State government direct and indirect costs associated with activity, system or process after project implementation. This section should be completed only if State government costs are expected to be reduced as a result of project implementation.

State Government Benefit -- Subtract the total "Annual Post-Project Cost" from the total "Annual Pre-Project Cost." This section should be completed only if State government costs are expected to be reduced as a result of project implementation.

Citizen Benefit -- Quantify, in written detail, the estimated annual value of the project to Iowa citizens**.** This includes the "hard cost" value of avoiding expenses (hidden taxes) related to conducting business with State government. These expenses may be of a personal or business nature. They could be related to transportation, the time expended on or waiting for the manual processing of governmental paperwork such as licenses or applications, taking time off work, mailing, or other similar expenses.

Opportunity Value/Risk or Loss Avoidance Benefit -- Quantify, in written detail, the estimated annual benefit to Iowa citizens or to State government. This could include such items as qualifying for additional matching funds, avoiding the loss of matching funds, avoiding program penalties/sanctions or interest charges, avoiding risks to health/security/safety, avoiding the consequences of not complying with State or federal laws, providing enhanced services, avoiding the consequences of not complying with enterprise technology standards, etc.

Total Annual Project Benefit -- Add the values of all annual benefit categories.

Total Annual Project Cost -- Quantify, in written detail, the estimated annual new cost necessary to implement and maintain the project including consulting fees, equipment retirement, ongoing expenses (i.e. labor, etc.), other technology (hardware, software and development), and any other specifically identifiable project related expense. In general, to calculate the annual hardware cost, divide the hardware and associated costs by three (3), the useful life. In general, to calculate the annual software cost, divide the software and associated costs by four (4), the useful life. This may require assigning consulting fees to hardware cost or to software cost. A different useful life may be used if it can be documented. **Response: $64,306.00 / five years useful life equals $12,861.00**

Benefit / Cost Ratio – Divide the "Total Annual Project Benefit" by the "Total Annual Project Cost." If the resulting figure is greater than one (1.00), then the annual project benefits exceed the annual project cost. If the resulting figure is less than one (1.00), then the annual project benefits are less than the annual project cost.

ROI -- Subtract the "Total Annual Project Cost" from the "Total Annual Project Benefit" and divide by the amount of the project funds requested.

Benefits Not Cost Related or Quantifiable -- List the project benefits and articulate, in written detail, why they (IT innovation, unique system application, utilization of new technology, hidden taxes, improving the quality of life, reducing the government hassle factor, meeting a strategic goal, etc.) are not cost related or quantifiable. Rate the importance of these benefits on a "1 – 10" basis, with "10" being of highest importance. Check the "Benefits Not Cost Related or Quantifiable" box in the applicable row. **Response: Included in Section 1, Part 3, last paragraph.**

ROI Financial Worksheet

Annual Pre-Project Cost - How You Perform The Function(s) Now	
FTE Cost (salary plus benefits):	**N/A**
Support Cost (i.e. office supplies, telephone, pagers, travel, etc.):	**N/A**
Other Cost (expense items other than FTEs & support costs, i.e. indirect costs if applicable, etc.):	**N/A**
A. Total Annual Pre-Project Cost:	**N/A**
Annual Post-Project Cost – How You Propose to Perform the Function(s)	
FTE Cost:	**N/A**
Support Cost (i.e. office supplies, telephone, pagers, travel, etc.):	**N/A**
Other Cost (expense items other than FTEs & support costs, i.e. indirect costs if applicable, etc.):	**N/A**
B. Total Annual Post-Project Cost:	**N/A**
State Government Benefit (= A-B):	**N/A**
Annual Benefit Summary	
State Government Benefit:	
Citizen Benefit (including quantifiable "hidden taxes"):	
pportunity Value and Risk/Loss Avoidance Benefit:	**$177,566.00**
C. Total Annual Project Benefit:	**$177,566.00**
D. Total Annual Project Cost:	**$12,861.00**
Benefit / Cost Ratio (C / D):	13.8
ROI (C – D / Project Funds Requested):	**256%**
x Benefits Not Cost Related or Quantifiable (including non-quantifiable "hidden taxes")	

IT Project Evaluation